

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

SEP 1 8 2013

Darryl Smalls, Commissioner U.S. Virgin Islands Department of Public Works 8244 Sub Base, St. Thomas Charlotte Amalie, St. Thomas, Virgin Islands 00802-5805

Dear Mr. Smalls:

This is in response to your request to the U.S. Environmental Protection Agency (EPA) for a Categorical Exclusion (CATEX) from substantive environmental review requirements, pursuant to 40 CFR Part 6, for your stormwater drainage system repair project located on the eastern side of Charlotte Amalie, St. Thomas, U.S. Virgin Islands. The Department of Public Works is seeking funds through a federal construction grant.

The existing 0.4 mile box culvert is located in a very high density and heavily trafficked area under a pedestrian sidewalk that runs parallel to First Avenue (Route 316). This box culvert collects stormwater runoff from the surrounding residential/business areas in Sugar Estate and Estate Thomas. A significant portion of the drainage basin south of Valdemar Hill Drive also drains to this box culvert. The stormwater from the culvert discharges to the Long Bay section of St. Thomas Harbor. Pedestrians and motorized vehicles traverse over the top of the culvert to enter and exit residences/businesses.

Rapid property development, lack of maintenance, blockages and debris, and high salinity runoff over the years deteriorated most of the top portion of the box culvert, and certain portions have collapsed. During heavy precipitation events, residential homes, businesses, churches, roadways and sidewalks in the project area flood due to the culvert not being able to intercept and handle the volume of stormwater runoff.

The proposed project consists of surveys, inspections, interior cleaning, and reconstruction of the entire top portion of the 0.4 mile box culvert. To withstand both the corrosive nature of runoff and the weight from heavy vehicles that park on top of the culvert, structural reinforcement of the culvert top will be required. Besides reinforcing the structural portion of the culvert box top, additional roadside inlets must be constructed, to allow stormwater drainage from roadways and sidewalks to enter the culvert.

The project meets the CATEX eligibility criteria found in 6.204(a)(l)(ii). This category includes "actions relating to existing infrastructure systems (such as sewer systems, drinking water supply systems, and stormwater systems, including combined sewer overflow systems) that involve minor upgrading, or minor expansion of system capacity or rehabilitation (including functional replacement) of the existing system and system components (such as the sewer collection network and treatment system; the system to collect, treat, store and distribute drinking water; and stormwater systems, including combined sewer overflow systems) or construction of new minor ancillary facilities adjacent to or on the same property as existing facilities."

This project does not involve a new or relocated discharge to surface or ground water, an increase in the volume or loading of pollutants to receiving water, or capacity to serve a population 30 percent greater than the existing population. Further, it is not contrary to any state or regional growth plan or strategy; and it is not primarily for the purpose of future development.

Additionally, the available information you provided concerning the proposed action indicates that none of the specific criteria for not granting a CATEX, found in 40 CFR 6.204(b)(1) through (b)(10), are present.

Based on our review, EPA approves the request for the CATEX. Please be reminded that EPA may revoke this CATEX if any of the following conditions occur:

- -changes in the proposed action render it ineligible for exclusion.
- -new evidence indicates that serious local or environmental issues exist, or
- -federal, state, or local laws would be violated.

Furthermore, EPA strongly encourages project sponsors to incorporate green practices into all phases of a project, including planning, design, and construction. Such practices can promote sustainable infrastructure, support development of a "green" workforce, and reduce long-term operation and maintenance costs. For your information, we are enclosing a fact sheet that identifies a variety of recommendations that should be given consideration in future projects. EPA hopes to see green practices incorporated as a standard part of future projects in the U.S. Virgin Islands.

This CATEX will be available on the EPA website at http://www.epa.gov/region02/spmm/r2nepa.htm.

Should you have any questions regarding this decision, please address them to Grace Musumeci, Chief, Environmental Review Section, at the above address.

Sincerely,

Judith A. Enck

Regional Administrator

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Enclosure

Jomo McClean, P.E., Design Program Manager, DPW cc:

Nicole Turner, P.E., Chief Engineer, DPW

# EPA Region 2 Green Project Recommendations and Resources May 2013

EPA strongly encourages that the concepts outlined below be considered by those receiving federal grant assistance for water, wastewater, stormwater, or water quality protection projects. In this regard, project sponsors are encouraged to use local and/or recycled materials; to recycle materials generated onsite; to utilize low-emissions technologies and fuels; and to incorporate renewable-energy (e.g., solar, wind, geothermal, biogas, and biomass) and energy-efficient and environmentally sustainable technology in project design, construction, and operation.

- Utilize Clean Diesel Technology <a href="http://www.epa.gov/otaq/diesel/">http://www.epa.gov/otaq/diesel/</a>
  Diesel controls, cleaner fuel, and cleaner construction practices can be utilized for both on-road and off-road equipment used for transportation, excavation, and other construction activities. Particular consideration should be given to the following concepts:
  - 1) Strategies and technologies to reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and establishing and enforcing limits on idling time.
  - 2) The use of ultra low sulfur diesel fuel in non-road applications.
  - 3) The use of add-on control technologies like diesel oxidation catalysts and particulate filters, repowering, or newer, cleaner diesel equipment. http://www.mass.gov/dep/air/diesel/conretro.pdf
  - 4) Contract specifications can be used to require contractors to use advanced pollution controls and clean fuels. A model specification is available online at <a href="http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf">http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf</a>.
- Use Alternative and Renewable Energy
  - The U.S. Department of Energy's "Green Power Network" (GPN) provides information and markets that can be used to supply alternative generated electricity. The following link identifies several suppliers of renewable energy. http://apps3.eere.energy.gov/greenpower/buying/buying\_power.shtml
- Incorporate onsite energy generation and energy efficient equipment upgrades into projects at drinking water and wastewater treatment facilities

  Promote the use of captured biogas in combined heat and power systems and/or renewable energy (wind, solar, etc.) to generate energy for use onsite as well as upgrades to more energy efficient equipment (pumps, motors, etc.).

  http://water.epa.gov/infrastructure/sustain/goinggreen.cfm
- Utilize Energy Star/Multi-media building and land design practices
   Consideration should be given to including building practices which have multi-media benefits,
   including energy efficiency, water conservation, and healthy indoor air quality. Apply building
   rating systems and tools, such as Energy Star, Energy Star Indoor Air Package, and Water Sense
   for building construction. <a href="http://www.energystar.gov/index.cfm?c=business.bus\_bldgs">http://www.usgbc.org/</a>

### • Implement Water Efficiency

Water efficiency can make infrastructure systems more sustainable by reducing the quantity of water treated and distributed through the water supply system, and subsequently by the wastewater treatment and disposal systems. EPA is promoting water use practices that increase efficiency, eliminate waste, and conserve water resources, resulting in a decreased burden on our water resources. The WaterSense program, <a href="http://www.epa.gov/watersense">http://www.epa.gov/watersense</a>, promotes the market for water-efficient products through the use of WaterSense-labeled products and the use of contractors certified through a WaterSense-labeled program. Water supply utilities can also decrease the burden on water and wastewater treatment systems by reducing the amount of drinking water lost from their leaking water distribution pipes. Additional details on the Sustainable Water Infrastructure can be found at <a href="http://water.epa.gov/infrastructure/sustain/index.cfm">http://water.epa.gov/infrastructure/sustain/index.cfm</a>.

# • Source Management for Stormwater Runoff

Green infrastructure and low impact development approaches can reduce, capture, and treat stormwater runoff at its source. Site-specific practices, such as green roofs, downspout disconnections, rain harvesting/gardens, planter boxes, and porous pavements are designed to mimic natural hydrologic functions and decrease the amount of impervious area and stormwater runoff. Preserving and recreating natural landscape features can create functional and appealing site drainage that treats storm water as a resource rather than a waste product.

http://www.epa.gov/nps/lid, and

http://water.epa.gov/infrastructure/greeninfrastructure/

# • Encourage cost-efficient, environmentally-friendly landscaping

EPA's GreenScapes program provides cost-efficient and environmentally friendly solutions for landscaping. Designed to help preserve natural resources and prevent waste and pollution, GreenScapes encourages companies, government agencies, other entities, and homeowners to make holistic decisions regarding waste generation and disposal and the associated impacts on land, water, air, and energy use.

http://www.epa.gov/wastes/conserve/tools/greenscapes/index.htm

# • Use recycled materials in highway and construction projects.

Many industrial and construction byproducts are suitable and available for use in road or infrastructure construction. <a href="http://www.epa.gov/osw/conserve/imr/index.htm">http://www.epa.gov/osw/conserve/imr/index.htm</a> Use of these materials can save money and reduce environmental impact. The Recycled Materials Resource Center has user guidelines and specifications for recycled material. <a href="http://rmrc.wisc.edu/">http://rmrc.wisc.edu/</a>

#### • Safely Reuse and/or Recycle Project-related Debris and Waste

The Federal Green Construction Guide for Specifiers includes a construction waste management specification. http://www.wbdg.org/design/greenspec.php

# Utilize environmentally preferable purchasing

Promote markets for environmentally preferable products by referencing EPA's multi-attribute Environmentally Preferable Purchasing guidance. <a href="http://www.epa.gov/epp">http://www.epa.gov/epp</a>